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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,344	05/10/2002	Yoshiki Wakizaka	037267-0142	6436
22428	7590	11/14/2006	EXAMINER	
FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			MILLS, DONALD L	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

10/031,344

Applicant(s)

WAKIZAKA, YOSHIKI

Examiner

Donald L. Mills

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2,4-6,8 and 10-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,4-6,8 and 10-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2, 4-6, 8, and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benveniste (US 5,513,379), hereinafter referred to as Benveniste, in view of Gitlin et al. (US 5,442,525), hereinafter referred to as Gitlin.

Referring to claim 2, Benveniste discloses a cellular system (Referring to Figure 3, and respective portions of the spec.) including:

*At least two base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.),

*A mobile station* (Referring to Figure 3, ref. sign 301 and respective portions of the spec.) *making communication with said base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *in CDMA* (CDMA, col. 1 lines 55-67); and

*An host station* (Referring to Figure 3, ref. sign 305 and respective portions of the spec.) *controlling* (control, col. 6 lines 12-25) *communication made between said base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *and said mobile station* (Referring to Figure 3, ref. sign 301 and respective portions of the spec.),

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*Characterized in that when one of said base stations (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) becomes saturated (interference, col. 6 lines 40-50); said mobile station (Referring to Figure 3, ref. sign 301 and respective portions of the spec.) makes communication in CDMA (CDMA, col. 1 lines 55-67) through a channel (channel, col. 6 lines 30-50) of other base station(s), and*

*Said mobile station (Referring to Figure 3, ref. sign 301 and respective portions of the spec.) when channels of a base station (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) with which said mobile station (Referring to Figure 3, ref. sign 301 and respective portions of the spec.) makes communication are saturated (interference, col. 6 lines 40-50), stops (blocking, col. 6 lines 44-50) a part of said communication, and makes the thus stopped part of said communication with other base station(s) (Referring to Figure 3, ref. sign 300 and respective portions of the spec.).*

Benveniste does not disclose *a multi-code CDMA system.*

Gitlin teaches a multi-code division multiple access system, which allows a user at a radio transmitter unit to dynamically change its source bit rate (See column 3, lines 31-41.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the multi-code CDMA system of Gitlin in the system of Benveniste. One of ordinary skill in the art at the time of the invention would have been motivated to do so in order to comply with the well-known standard of multi-code CDMA as taught by Benveniste (See column 1, lines 55-67.)

Referring to claim 4, Benveniste discloses *a cellular system* (Fig. 3 and respective portions of the spec.) *including at least two base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.);

*A mobile station* (Referring to Figure 3, ref. sign 301 and respective portions of the spec.) *making communication with said base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec. in CDMA (CDMA, col. 1 lines 55-67); *and*

*An host station* (Referring to Figure 3, ref. sign 305 and respective portions of the spec.) *controlling communication made between said base stations and said mobile station* (Referring to Figure 3, ref. sign 301 and respective characterized in that one of said base stations (Referring to Figure 3, ref. sign 300 and respective portions of the spec.), *an receipt of a request of starting communication in n codes* (n is an integer equal to or greater than 2) from said mobile station (Referring to Figure 3, ref. sign 301 and respective portions of the spec.), *checks whether channels are short, and transmits the result of checking to said host station* (Referring to Figure 3, ref. sign 305 and respective portions of the spec.),

*Said host station* (Referring to Figure 3, ref. sign 305 and respective portions of the spec.) *receives said result from said one of said base stations, and,*

*If channels for n codes can be secured* (reserved, col. 4 lines 1-54), *instructs said one of said base station* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *to start making communication, whereas if channels for m codes* (m is an integer smaller than n ( $m < n$ )) *can be secured* (reserved, col. 4 lines 1-54), *instructs said one of said base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *to start making*

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*communication in m codes and further instructs other base station(s) (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) to start making communication in (n-m) codes, and*

*Said mobile station (Referring to Figure 3, ref. sign 301 and respective portions of the spec.) makes communication with said one of said base stations in m codes, and further makes communication with said other base station(s) (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) in (n-m) codes.*

Benveniste does not disclose *a multi-code CDMA system*.

Gitlin teaches a multi-code division multiple access system, which allows a user at a radio transmitter unit to dynamically change its source bit rate (See column 3, lines 31-41.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the multi-code CDMA system of Gitlin in the system of Benveniste. One of ordinary skill in the art at the time of the invention would have been motivated to do so in order to comply with the well-known standard of multi-code CDMA as taught by Benveniste (See column 1, lines 55-67.)

Referring to claims 5 and 11, Benveniste discloses the method as set forth in claim 10, further comprising the steps of:

*Said one of said base stations (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) stopping (blocking, col. 6 lines 44-50) communications made with a mobile station (Referring to Figure 3, ref. sign 301 and respective portions of the spec.) only in part of codes, when said one of said base stations (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) receives a request of starting communication from another mobile station (Referring to Figure 3, ref. sign 301 and respective portions of the spec.) and judges that*

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*channels* (channel, col. 6 lines 30-50) is short for satisfying said request, and transmitting a request to said host station (Referring to Figure 3, ref. sign 305 and respective portions of the spec.) *to make communication with other base station(s)* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *in codes equal to the stopped* (blocking, col. 6 lines 44-50) *codes*:

*Said host station* (Referring to Figure 3, ref. sign 305 and respective portions of the spec.), *on receipt of said request to make communication with other base station(s)* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.), *instructing a base station* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *other than said one of said base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *to start making communication with said one of said base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *in codes equal to said stopped* (blocking, col. 6 lines 44-50) *codes; and*

*Said mobile station* (Referring to Figure 3, ref. sign 301 and respective portions of the spec.) *stopping communication made with said one of said base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *in said part of codes, and starting making communication with said base station* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *other than one of said base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *in codes equal to said stopped* (blocking, col. 6 lines 44-50) *codes*.

Benveniste does not disclose a multi-code CDMA system.

Gitlin teaches a multi-code division multiple access system, which allows a user at a radio transmitter unit to dynamically change its source bit rate (See column 3, lines 31-41.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the multi-code CDMA system of Gitlin in the system of Benveniste. One of ordinary skill in the art at the time of the invention would have been motivated to do so in order to comply with the well-known standard of multi-code CDMA as taught by Benveniste (See column 1, lines 55-67.)

Referring to claim 6, the primary reference further teaches *the cellular system as set forth in claim 4 or 5, wherein said one of said base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *and said other base station(s)* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *have an adaptive array antenna* (Fig. 2 ref. signs 201, 202, 203, 204 and 205 and respective portions of the spec.).

Referring to claim 8, Benveniste discloses *a method of making communication in CDMA* (CDMA, col. 1 lines 55-67) *where a mobile station* (Referring to Figure 3, ref. sign 301 and respective portions of the spec.) *makes communication with base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *in CDMA* (CDMA, col. 1 lines 55-67) *and an host station* (Referring to Figure 3, ref. sign 305 and respective portions of the spec.) *controls* (control, col. 6 lines 12-25) *communication made between said base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *and said mobile station* (Referring to Figure 3, ref. sign 301 and respective portions of the spec.),

*Characterized by the step of, said mobile station* (Referring to Figure 3, ref. sign 301 and respective portions of the spec.), *when one of said base stations* (Referring to Figure 3, ref. sign



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300 and respective portions of the spec.) *becomes saturated* (interference, col. 6 lines 40-50), *making communication in CDMA* (CDMA, col. 1 lines 55-67) *through a channel* (channel, col. 6 lines 30-50) *of other base station(s)*,

*Wherein said mobile station* (Referring to Figure 3, ref. sign 301 and respective portions of the spec.), *when channels* (channel, col. 6 lines 30-50) of a base station (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *with which said mobile station* (Referring to Figure 3, ref. sign 301 and respective portions of the spec.) *makes communication are saturated* (interference, col. 6 lines 40-50), *stops* (blocking, col. 6 lines 44-50) *a part of said communication, and makes the thus stopped* (blocking, col. 6 lines 44-50) *part of said communication with other base station(s)*.

Benveniste does not disclose *a multi-code CDMA system*.

Gitlin teaches a multi-code division multiple access system, which allows a user at a radio transmitter unit to dynamically change its source bit rate (See column 3, lines 31-41.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the multi-code CDMA system of Gitlin in the system of Benveniste. One of ordinary skill in the art at the time of the invention would have been motivated to do so in order to comply with the well-known standard of multi-code CDMA as taught by Benveniste (See column 1, lines 55-67.)

Referring to claim 10, Benveniste discloses *a method of making communication in CDMA* (CDMA, col. 1 lines 55-67) *where a mobile station* (Referring to Figure 3, ref. sign 301 and respective portions of the spec.) *makes communication with base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *in CDMA* (CDMA, col. 1 lines 55-

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67) *and an host station* (Referring to Figure 3, ref. sign 305 and respective portions of the spec.) *controls* (control, col. 6 lines 12-25) *communication made between said base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *and said mobile station* (Referring to Figure 3, ref. sign 301 and respective portions of the spec.),

*Characterized by the steps of: one of said base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.), *on receipt of a request of starting communication in n codes* (n is an integer equal to or greater than 2) *from said mobile station* (Referring to Figure 3, ref. sign 301 and respective portions of the spec.), *checking whether channels are short, and transmitting the result of checking to said host station* (Referring to Figure 3, ref. sign 305 and respective portions of the spec.),

*Said host station* (Referring to Figure 3, ref. sign 305 and respective portions of the spec.) *receiving said result from said one of said base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.), *and,*

*If channels* (channel, col. 6 lines 30-50) *for n codes can be secured* (reserved, col. 4 lines 1-54), *instructing said one of said base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *to start making communication, whereas if channels* (channel, col. 6 lines 30-50) *for m codes* (m is an integer smaller than n ( $m < n$ )) *can be secured* (reserved, col. 4 lines 1-54), *instructing said one of said base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *to start making communication in m codes and further instructing other base station(s)* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *to start making communication in (n-m) codes, and*

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*Said mobile station* (Referring to Figure 3, ref. sign 301 and respective portions of the spec.) *making communication with said one of said base stations* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *in m codes, and further making communication with said other base station(s)* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *in (n-m) codes.*

Referring to claim 12 as explained in the rejection statement of claim 10, Benveniste and Gitlin teach all of the claim limitations of claim 10 (parent claim.) Benveniste further discloses the method as set forth in claim 10 or 11, *wherein said one of said base station(s)* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *and said other base station(s)* (Referring to Figure 3, ref. sign 300 and respective portions of the spec.) *make communication with said mobile station* (Referring to Figure 3, ref. sign 301 and respective portions of the spec.) *in CDMA* (CDMA, col. 1 lines 55-67) *through an adaptive array antenna* (Fig. 2 ref. signs 201, 202, 203, 204 and 205 and respective portions of the spec.):

Benveniste does not disclose *a multi-code CDMA system.*

Gitlin teaches a multi-code division multiple access system, which allows a user at a radio transmitter unit to dynamically change its source bit rate (See column 3, lines 31-41.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the multi-code CDMA system of Gitlin in the system of Benveniste. One of ordinary skill in the art at the time of the invention would have been motivated to do so in order to comply with the well-known standard of multi-code CDMA as taught by Benveniste (See column 1, lines 55-67.)

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***Response to Arguments***

3. Applicant's arguments with respect to claims 2, 4-6, 8, and 10-12 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L. Mills whose telephone number is 571-272-3094. The examiner can normally be reached on 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Donald L Mills

*Dem*

November 11, 2006

*Seema S. Rao*  
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